

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested.

Claim 2 has been cancelled without prejudice or disclaimer to the subject matter contained therein.

Rejection under 35 U.S.C. §102(b):

Claims 1-7, 9, 12, 13, and 16-18 have been rejected under 35 U.S.C. §102(b) as being anticipated by Maeshima (US 2002/0032025). This rejection is respectfully traversed and submitted to be inapplicable to the amended claims, as well as new claims 19-21 for the following reasons.

Independent claim 1 is patentable over Maeshima because claim 1 recites a terminal including, a detection portion configured to detect a control frame, which is periodically transmitted from a control station, the control frame containing control information indicating a time period in which access to the communication medium is permitted; and an issuance portion configured to issue a frame containing the control information of the control frame, when the control frame is not detected over a predetermined first time period.

One of the features of the present invention, as recited in claim 1, is the control frame containing control information indicating a time period in which access to the communication medium is permitted. Regarding this, the specification at page 14, lines 10-19, discusses an example where the control station A periodically issues a control frame containing control information. In the control information, a time and a time interval are specified when media access by the controlled stations is permitted. It is submitted that Maeshima fails to disclose or suggest this aspect of the invention.

Another of the features of the present invention, as recited in claim 1, is the frame containing the control information of the control frame. As an example, the specification at page 15, line 9 – page 16, line 5, discusses that the frame (i.e., the substitute frame) contains the control information contained in the received control frame, without modification, so that the substitute frame is the same as the control frame, or at the very least, contains the same control information of the control frame. This is possible because the controlled stations store the control

information of the control frame in storage (see page 4, lines 23 – page 5, line 13 and page 14, lines 20-23). It is further submitted that Maeshima fails to disclose or suggest this aspect of the invention.

Maeshima discloses a communication system containing a master control station 100 and multiple slave control stations 101-107 (see paragraph 38). The master control station 100 and the slave control stations 101-107 communicate with each other via frames (see paragraph 45). Each frame includes a media information transmission region that is made up of a descending control information section and an ascending control information section. The master control station 100 transmits control information to the respective communication terminals in the descending control section. All communication terminals 100-107 on the network transmit identifying information in the ascending control information section. The ascending control information transmitted by all terminals is used to determine which terminals are connected to the network (i.e. “so that a mutual connection condition is confirmed through information of connection link relationship among respective stations”) (see paragraph 45). The master control station 100 forms network common information by sending out a broadcast and then receiving the ascending information identifying all the terminals on the network (see paragraphs 68-69). When the descending information is not received from the master control station 100, the ascending control information identifying all the terminals is still received by the slave control stations 101-107. When this occurs, the slave control stations 101-107 determine that the master control station 100 is not transmitting (see paragraph 78). When the master control station 100 is not functioning properly, a slave control station 101-107 functions as the master control station 100. This requires that all slave control stations must have an appropriate network structure to be a control station (see paragraph 84).

Based on the above discussion, it is apparent that Maeshima discloses a system of control stations, designated as either master or slave, but each capable of acting in its own capacity as a master control station. When the descending control information is not received by the slave control stations, the ascending control information is used to determine the connection status of the network. A new master control station is selected, and it begins transmitting new master control information, via the frames, to all the terminals in the network. However, Maeshima does not provide any details regarding the new master control information. Therefore, Maeshima does

not disclose or suggest a detection portion for detecting a control frame, which is periodically transmitted from a control station, the control frame containing control information indicating a time period in which access to the communication medium is permitted. Furthermore, Maeshima does not disclose or suggest a frame, issued by an issuance portion, containing the control information of the control frame from the control station. As a result, claim 1 is patentable over Maeshima.

Independent claim 18 is patentable over Maeshima for reasons similar to those discussed above with regard to claim 1. That is, claim 18 recites a communication method including, in part, detecting a control frame, which is periodically transmitted from a control station, the control frame containing control information indicating a time period in which access to the communication medium is permitted; and issuing a frame containing the control information of the control frame. It is submitted that these features are not disclosed or suggested by Maeshima. As a result, claim 18 is patentable over Maeshima.

Independent claim 19 is patentable over Maeshima for reasons similar to those discussed above with regard to claim 1. That is, claim 19 recites an integrated circuit including, in part, a detection portion configured to detect a control frame, which is periodically transmitted from a control station, the control frame containing control information indicating a time period in which access to the communication medium is permitted; and a frame, issued by an issuance portion, containing the control information of the control frame. It is submitted that these features are not disclosed or suggested by Maeshima. As a result, claim 19 is patentable over Maeshima.

Independent claim 20 is patentable over Maeshima for reasons similar to those discussed above with regard to claim 1. That is, claim 20 recites a control method executed by an integrated circuit, including, in part, detecting a control frame, which is periodically transmitted from a control station, the control frame containing control information indicating a time period in which access to the communication medium is permitted; and issuing a frame containing the control information of the control frame. It is submitted that these features are not disclosed or suggested by Maeshima. As a result, claim 20 is patentable over Maeshima.

New claim 21 is dependent from independent claim 1 and further recites a control frame memory portion operable to store the control information contained in the control frame. According to the example in the specification at page 14, line 20 – page 15, line 8, the controlled

stations B, C, and D store the contents of a control frame every time the control frame is received. The terminal creates the frame containing the control information of the control frame by using the stored information of the control frame. Maeshima fails to disclose or suggest a memory portion corresponding to the claimed control frame memory portion. As a result, claim 21 is patentable over Maeshima.

Furthermore, it is noted that claims 3-7, 9, 12, 13, and 16-18, and 21 are either directly or indirectly dependent from independent claim 1. Therefore, it is submitted that claims 3-7, 9, 12, 13, and 16-18, and 21 are allowable at least based on their dependency from claim 1.

Rejections under 35 U.S.C. §103(a):

Claim 8 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Maeshima (US 2002-0032025).

It is noted that claim 8 is dependent from independent claim 1. Therefore, it is submitted that claim 8 is allowable at least based on its dependency from claim 1.

In addition, claims 10, 11, 14, and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Maeshima (US 2002-0032025) in view of Isumi (US 5,815,816). This rejection is respectfully traversed and submitted to be inapplicable to the claim for the following reasons.

Regarding Isumi, it is relied upon in the rejection for disclosing a competition between base stations. However, it is apparent that Isumi fails to disclose or suggest the features lacking from Maeshima discussed above with regard to claim 1. Therefore claims 10, 11, 14, and 15 are patentable over the combination of Maeshima and Isumi at least based on their dependency from claim 1.

Because of the above-mentioned distinctions, it is believed clear that claims 1 and 3-21 are allowable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1 and 3-21. Therefore it is submitted that claims 1 and 3-21 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The examiner is invited to contact the undersigned by telephone if it is felt that there are more issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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